

# **Operations Report**

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June 3, 2004
CDF Weekly Meeting



# Recovery from Feeder 35 Fault

- Last Thursday at 5:30am a fault on feeder 35 dropped power to Tevatron and CDF.
  - All checks indicate that the abort was clean.
- Access on Thursday: BMU HV, L00 fuses, Si fib, Roman pot
- CDF was back up and taking cosmics late Thursday
  - Great work everyone!
- Tevatron was cooled down on Friday, but various problems held off the next shot until Sunday.
  - About half the pbar stack was lost when switching from cooling back to stacking.
  - Poor pbar efficiency on the shot yielded low initial luminosity.



#### Solenoid

- On Sunday, problems arose with valves that allow us to pump the "Watt can".
  - Roser &Co. made an access early Mon. to investigate.
  - Temporary kludge: we can pump down with a roughing pump, but only with the solenoid off. Ramp down, pump, ramp up =  $\sim$ 2 hrs.
- Replacement parts are ready; 2 hr. access requested at the end of this store for replacement.



# **Trigger Tables**

#### Trigger table tests:

- SVT dzin requirement -> greatly suppresses fakes at high luminosity, nearly 100% efficient for signal. Should allow standard table to work at 8e31.
- New phi-gap muons, diffractive, and tau triggers.
- Test of the mechanism for fractional prescaling.



### This Week's Stores

| Date  | Store | Hrs | Inst Lum<br>(initial) | Deliv<br>(nb <sup>-1</sup> ) | Lum to tape (ε)            | Si Phys<br>Lum (ε)         | Comment                                  |
|-------|-------|-----|-----------------------|------------------------------|----------------------------|----------------------------|--|
| 5/30  | 3547  | 13  | 26.0e30               | 761                          | 609 (80%)                  | 566 (74%)                  |  |
| 5/31  | 3549  | 14  | 54.5e30               | 1644                         | 1455 (89%)                 | 0                          | Solenoid, Si,<br>COT, TOF off            |
| 6/1   | 3552  | 32  | 69.1e30               | 3189                         | 2123 (67%)                 | 2091(66%)                  | Watt can,<br>lostp, a.g.,<br>TeV studies |
| 6/2   | 3554  |     | 74.1e30               |                              |                            |                            | Ongoing                                  |
| Total |       |     |                       | 5.6 pb <sup>-1</sup>         | 4.2 pb <sup>-1</sup> (75%) | 2.7 pb <sup>-1</sup> (48%) |  |



# Summary

- CDF recovered well from the power failure.
- Problem with solenoid arose at an unfortunate time. Repair is anticipated at next opportunity.
- Tevatron is running well. Store 3554 began with second highest luminosity yet achieved.
- With COT running full HV, the trigger/DAQ is okay.